ABSTRACTS

Policy Research Working Paper Series

Numbers 1989–2015

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ABSTRACTS
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Numbers 1989–2015

1989. Contingent Government Liabilities: A Hidden Risk for Fiscal Stability

Hana Polackova
(October 1998)

Many governments have faced serious fiscal instabilities as a result of their growing contingent liabilities. But conventional fiscal analysis and institutions fall short in addressing contingent fiscal risks. What approaches in fiscal analysis and standards for public sector management would foster sound fiscal performance? And how can policymakers be made accountable for recognizing the long-term costs of both direct and contingent forms of government activity in their decisions?

Governments are increasingly exposed to fiscal risks and uncertainties for three main reasons:

- The increasing volume and volatility of international flows of private capital.
- The state's transformation from financing services to guaranteeing that the private sector will achieve particular outcomes.
- Moral hazards arising in markets because the government is perceived to have residual responsibility for market outcomes.

Sources of fiscal risk may be direct or contingent (a liability only if a particular event occurs). Whether direct or contingent, they are either explicit (recognized as a government liability by law or by contract) or implicit (a "moral" obligation reflecting public expectations and pressure from interest groups).

The recent Asian crisis revealed that major moral hazards exist in markets and that sizable hidden fiscal risks may arise from contingent forms of government support.

Governments must understand and know how to handle contingent liabilities if they are to avoid the danger of sudden fiscal instability and realize their long-term policy objectives. They can reduce fiscal risks by incorporating contingent liabilities into their analytical, policy, and institutional public finance frameworks.

Governments can address fiscal risk through three channels in particular, says Polackova:

- By including contingent and implicit financial risks in their fiscal analysis and (to deter moral hazard in the market) by publicly acknowledging the limits of state responsibilities.
- By reflecting the cost of contingent liabilities in policy choices, budgeting, financial planning, reporting, and auditing.
- By developing institutional capacity to evaluate, regulate, control, and prevent financial risk in both the public and private sectors.

Given the increasingly serious implications of contingent government liabilities for the fiscal outlook of countries, Polackova argues that it is time for the World Bank, the International Monetary Fund, and others to:

- Incorporate government contingent fiscal risks in their analysis of a country's fiscal sustainability, policies, and institutions.
- Require countries to disclose information regarding their exposure to contingent fiscal risks.
- Help countries embrace contingent liabilities in their analytical, policy, and institutional public finance frameworks.

This paper — a product of the Poverty Reduction and Economic Management Sector Unit, Europe and Central Asia Region — is part of a larger effort in the region to enhance the Bank's analytical and operational work in public finance. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Alison Panton, room H11-033, telephone 202-458-5433, fax 202-477-1440, Internet address apanton@worldbank.org. The author may be contacted at hpolackova @worldbank.org. (31 pages)

1990. The East Asia Crisis and Corporate Finances: The Untold Micro Story

Michael Pomerleano
(October 1998)

Empirical findings about corporate finance support Krugman's view that crony capitalism lay at the core of Asia's recent financial crisis. Implicit government guarantees and poor banking supervision led to poor decisions about credit allocation in Asia's banking-dominated financial systems.

Explanations of what caused the Asian crisis have focused on macroeconomic factors. Pomerleano offers a complementary perspective focusing on corporate distress and corporate finance.

He presents key ratios for companies in various countries. Using global benchmarking, he imposes a consistent cross-border analysis of financial risk and performance. He provides a statistical review of corporate financial practices and performance in Hong Kong, Indonesia, the Republic of Korea, Malaysia, the Philippines, Taiwan (China), and Thailand — benchmarked against corporate financial data for other countries in Latin America and for four industrial countries: France, Germany, Japan, and the United States.

One common pattern emerges from the analysis: unsustainable rapid (and probably excessive) investment in fixed assets financed by excessive borrowing in some Asian countries (for example, Indonesia, Korea, and Thailand).

The result of the East Asian investment spending spree was poor profitability, reflected in low and declining returns on equity and capital.

At the core of the corporate crisis were financial excesses that violated prudent financial practices and eventually led to the inevitable financial distress.

The empirical findings support Krugman's view: that crony capitalism lay at the core of the crisis. Crony capitalism was manifested in poor policies — implicit government guarantees and poor banking supervision — that led to poor decisions about credit allocation in the banking-dominated financial system.

Preliminary findings also suggest vast differences in economic value-added among countries (both industrial and developing). In an era of increasing capital mobility, corporations are not adhering to global standards in creating shareholder value.

The implications for enhanced regulation and supervision of the financial system are unmistakable. The recent introduction of improved loan classification systems and capital adequacy norms are encouraging first steps toward better regulation and supervision. But they must be supplemented by an improved regulatory framework and better enforcement.

This paper is a product of the Development Prospects Group, Office of the Senior Vice President, Development Economics. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Noemi Dacanay, room F6P-198, telephone 202-473-4068, fax 202-974-4802, Internet address ndacanay@worldbank.org. The author may be contacted at mpomerleano @worldbank.org. (36 pages)

1991. Reducing Air Pollution from Urban Passenger Transport: A Framework for Policy Analysis

Mark Heil and Sheoli Pargal
(October 1998)

A policy considered in isolation may be ineffective because of the countervailing impact of other factors. And the success of a policy may itself lead to perverse incentives. Thus it is important to design complementary policies that support the original goal. Controlling air pollution from urban transport requires attention to land use planning, transport needs and modes, and air quality.

Air quality is declining in urban areas, in part because of the rapid motorization of societies worldwide. To combat the problem, various pollution control strategies have been used or proposed for urban passenger transport. Heil and Pargal develop a simple framework to analyze these strategies.

The virtue of this framework is its simplicity and its separation of factors. The authors examine the point of impact of different policy levers and categorize different instruments in a way that should help policymakers choose among them.

The framework explicitly recognizes behavioral incentives, especially the fact that offsetting changes in consumer behavior can often undermine the original intent of particular policies. Among the findings:

- Policies aimed at improving transport efficiency often improve air quality at the same time.
- But supply-side policies to relieve traffic congestion sometimes conflict with supply-side measures to control air pollution. Improvements in roads and traffic, for example, may increase private motorized traffic conditions, making it difficult to assess the net effect of the improvements on air pollution.
- There seems to be considerable scope for low-cost solutions to air quality problems associated with the transport sector. Inexpensive, low-technology solutions, such as establishing bus lanes or paving dirt roads, substantially improve both transport efficiency and air quality.
- Behavioral change is difficult when viable transport alternatives are unavailable. A viable public transport system is essential to reduce transport-caused air pollution in densely populated areas.
- Fuel and emission standards should become stricter over time. Standards should be gradually ratcheted up to give domestic auto industries the incentive to develop and adopt cleaner technology.

This paper — a product of Infrastructure and Environment, Development Research Group — is part of a larger effort in the group to study the impact of motorization on air pollution. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Roula Yazigi, room MC2-635, telephone 202-473-7176, fax 202-522-3230, Internet address ryazigi @worldbank.org. Sheoli Pargal may be contacted at spargal@worldbank.org. (25 pages)

1992. The Present Outlook for Trade Negotiations in the World Trade Organization

John Croome
(October 1998)

With their wide range of concerns, developing countries cannot speak with a single voice in the World Trade Organization. But to the extent that they can present a common front and identify issues on which they can achieve gains, they will be better placed to help shape negotiations rather than react to them.

The Uruguay Round agreements established the World Trade Organization (WTO), overhauled and strengthened the GATT rules on trade in goods, and added rules on trade in services and intellectual property. Individual countries made wide-ranging commitments to liberalize trade policies.

A new round of multilateral trade negotiations may be launched in the year 2000 or soon after. Croome reviews the probable agenda for these negotiations and reactions thereto.

Agriculture is a certainty for negotiations, with agricultural exporters insisting on liberalized markets. Net food importers fear such reforms will increase food costs and endanger food security.

Trade in services is certain to be on the agenda, but some developing countries see little to gain in this area, unless their workers gain opportunities to provide services in other countries

Many developing countries could benefit from further negotiations on tariffs.

Developing countries are determined to avoid opening up the Uruguay Round agreement on textiles and clothing. They also fear that any WTO agreement on environmental issues will provide excuses to increase barriers on their exports. They all oppose WTO discussion of labor standards. They are divided about whether to reach an agreement on investment but tend to favor seeking an agreement on competition issues.

Developing countries' attitudes toward further WTO negotiations are divided; they tend to be negative, but may be shifting toward support.

Small and underdeveloped countries are unenthusiastic because they cannot participate effectively in negotiations in Geneva and are distracted by upcoming negotiations with the European Union.

Many developing countries feel their levels of commitment are already heavy, they need more time to absorb the consequences of their commitments, and it would be counterproductive to rush into another round of negotiations. They argue that industrial countries have yet to deliver on liberalization important to their trade.

Countries that favor negotiations favor a broad agenda for negotiations because they have relatively wide trade interests, best served by a single negotiation that offers something for all participants and allows tradeoffs.

This paper — a product of Trade, Development Research Group — is part of a larger effort in the group to assist developing countries liberalize their trade through participation negotiations at the World Trade Organization. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Lili Tabada, room MC3-333, telephone 202-473-6896, fax 202-522-1159, Internet address ltabada@worldbank.org. The author may be contacted at jcroome @compuserve.com. (53 pages)

1993. Financial Safety Nets and Incentive Structures in Latin America

Philip L. Brock
(October 1998)

Three principles that should govern the safety net for a country's financial system, altering bank behavior and deepening fi-

nancial intermediation by shifting some risk to the government.

Well-designed bank safety nets should alter bank behavior and deepen financial intermediation by shifting some risk to the government. It is often said that the best safety net for a financial system is one that makes market participants behave as if the safety net did not exist.

Brock examines issues associated with safety nets for financial systems in small open economies such as those in Latin America.

He stresses three principles that should guide the design and operations of a financial system safety net:

• *Safety nets should strengthen rather than supplant private capital, monitoring, and closure mechanisms.* The presence of asymmetric information gives borrowers, bankers, and depositors incentives to voluntarily impose capital requirements, monitoring arrangements, and contractual provisions for the closure or recapitalization of firms and banks. Government regulations or safety net provisions should be designed to work in harmony with the incentives private agents already face.

• *Safety nets must take into account both aggregate risk and idiosyncratic risk.* In particular, good safety nets must be designed to take into account large but infrequent macroeconomic shocks as well as to encourage prudential bank behavior during normal times.

• *Safety net design should be grounded in the historical and institutional framework of any given country.* Safety nets evolve over time and must allow for problems that have existed for a long time — but must also take into account current political pressures and today's generally higher expectations about the government's ability to insure the financial system against aggregate shocks.

This paper — a product of Finance, Development Research Group — is part of a larger effort in the group to study the role of incentives in finance. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Kari Labrie, room MC3-456, telephone 202-473-8256, fax 202-522-1155, Internet address klabrie @worldbank.org. The paper may also be downloaded at http://www.worldbank.org/html/prdhome/Interest/interestweb.htm. The author may be contacted at plbrock @u.washington.edu. (35 pages)

1994. Estimating Wealth Effects without Expenditure Data — or Tears: With an Application to Educational Enrollments in States of India

Deon Filmer and Lant Pritchett
(October 1998)

The relationship between household wealth and educational enrollment of children can be estimated without expenditure data. A method for doing so — which uses an index based on household asset ownership indicators — is proposed and defended in this paper. In India, children from the wealthiest households are over 30 percentage points more likely to be in school than those from the poorest households, although this gap varies considerably across states.

To estimate the relationship between household wealth and the probability that a child (aged 6 to 14) is enrolled in school, Filmer and Pritchett use National Family Health Survey (NFHS) data collected in Indian states in 1992 and 1993.

In developing their estimate Filmer and Pritchett had to overcome a methodological difficulty: The NFHS, modeled closely on the Demographic and Health Surveys, measures neither household income nor consumption expenditures. As a proxy for long-run household wealth, they constructed a linear "asset index" from a set of asset indicators, using principal components analysis to derive the weights.

This asset index is robust, produces internally coherent results, and provides a close correspondence with data on state domestic product and on state level poverty rates.

They validate the asset index using data on consumption spending and asset ownership from Indonesia, Nepal, and Pakistan. The asset index has reasonable coherence with current consumption expenditures and, more importantly, works as well as — or better than — traditional expenditure-based measures in predicting enrollment status.

The authors find that on average a child from a wealthy household (in the top 20 percent on the asset index developed for this analysis) is 31 percent more likely to be enrolled in school than a child from a poor household (in the bottom 40 percent).

This paper — a product of Poverty and Human Resources, Development Research Group — is part of a larger effort in the group to inform educational policy. The study was funded by the Bank's Research Support Budget under the research project "Educational Enrollment and Dropout" (RPO 682-11). Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Sheila Fallon, room MC3-638, telephone 202-473-8009, fax 202-522-1153, Internet address sfallon @worldbank.org. The authors may be contacted at dfilmer@worldbank.org or lpritchett@worldbank.org. (38 pages)

1995. What Macroeconomic Policies Are "Sound?"

Mansoor Dailami and Nadeem ul Haque
(October 1998)

In the new globalized financial market environment facing developing countries, volatility has become an increasing fact of life. Faced with such volatility, what broad principles should guide their macroeconomic management?

Most people agree that the soundness of macroeconomic policies should be judged by their efficacy in meeting the objectives of steady growth, full employment, stable prices, and a viable external payments situation.

What people debate about are the links between macroeconomics and economic structure — and in the current environment, the openness to foreign capital flows.

As developing countries become more integrated into international financial markets, volatility may become an increasing fact of life. Faced with such volatility, how should these countries frame their macroeconomic policies? What broad principles should guide their macroeconomic management?

In many developing countries, the openness of the capital account has been significant. Many countries have made the transition toward an open-economic paradigm. As a result, fluctuations in international capital and currency markets, as well as shifts in foreign investors' attitudes and confidence, have greatly affected local stock market prices, the level of foreign exchange reserves, and the scope for monetary and interest rate policy.

Capital controls and foreign exchange restrictions have been significantly dismantled in a number of developing and transition economies.

In 1970, only 34 countries — or 30 percent of the International Monetary Fund's membership — had assumed Article VIII of the IMF Articles of Agreement, declaring their currency convertible on current account transactions. By 1997, this figure had increased to 77 percent.

Does financial integration make it more difficult to achieve macroeconomic stability? Apparently not, on the whole, although at times large short-term capital flows can lead to misaligned asset prices, including exchange rates.

What financial integration does do is limit how far countries can pursue policies incompatible with medium-term financial stability. The disciplining effect of global financial and product markets applies not only to policymakers — through pressures on financial markets — but also to the private sector.

Rather than constrain the pursuit of appropriate policies, globalization may add leverage and flexibility to such policies, easing financing constraints and extending the time during which countries can make adjustments.

But markets will provide this leeway only if they perceive that countries are undertaking adjustments that address fundamental imbalances.

This paper — a joint product of the Regulatory Reform and Private Enterprise Division, Economic Development Institute, and the Research Department, International Monetary Fund — was presented at the conference "South Asia Beyond 2000: Policies for Sustained Catch-Up Growth," March 19–20, 1998, Colombo, Sri Lanka. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Bill Nedrow, room G2-072, telephone 202-473-1585, fax 202-334-8350, Internet address wnedrow @worldbank.org. The authors may be contacted at mdailami@worldbank.org or nhaque@imf.org. (46 pages)

1996. Namibia's Social Safety Net: Issues and Options for Reform

Kalinidhi Subbarao
(October 1998)

At a time when Namibia's informal social safety net is failing the poor, Namibia has too many poorly administered formal programs. The result: regional bias, exclusion errors, and fraud. It seems highly desirable for the formal system to comprise four programs: a social pension plus grants for poor children, blind people, and the disabled.

In Namibia, the extended family is a big shock absorber: informal sharing arrangements between and within households are a unique source of strength. Grandparents contribute enormously to the continuation of this safety net by letting the entire family share their social pension in times of need and by looking after their grandchildren when parents are away or infected by AIDS.

But these informal safety nets are not robust at times of drought and are strained when unemployment, and the burden of children of AIDS-infected parents, are high.

Among formal safety net programs, the social pension and the disability grant touch the lives of the poor more than other programs, but the administration of both programs needs to improve.

Namibia is one of the few African countries to administer a social pension for everyone 60 and over — a safety net that has potential to significantly reduce poverty. But the program suffers from undercoverage (exclusion errors) in the heavily populated and poorer North.

With the disability pension, regional asymmetry is pervasive and needs immediate correction.

Child allowances should relieve poverty, but the three main grants for needy children are heavily urban-biased and regionally asymmetric. The bias toward urban and middle-class children is greatest for in-kind (school feeding and shelter/housing) programs. A priority should be placed on reallocating public resources to upgrade squatter settlements and single-room apartments. Nongovernmental organizations need to be encouraged to explore demand-driven approaches to promoting informal businesses in rural Namibia.

Programs to subsidize welfare homes and remit rent for apartments where rent is overdue should be eliminated to free up resources for social pensions and disability grants. It appears best to supplement cash transfer programs by a better targeted shelter/housing program and an expanded labor-based works program (implemented by private contractors).

The Northern and Northeastern provinces are underserved by all transfer programs; coverage in the North must improve. Further decentralization should help rationalize the deployment of staff resources in social welfare.

This paper is a product of the Poverty Division, Poverty Reduction and Economic Management Network. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Precy Lizarondo, room MC4-568, telephone 202-458-7199, fax 202-522-3283, Internet address plizarondo@worldbank.org. The author may be contacted at ksubbarao @worldbank.org. (48 pages)

1997. On Measuring Literacy

Kaushik Basu and James E. Foster
(October 1998)

A new approach to evaluating the level of effective literacy in a region or country takes into account the externality within a household of a literate person.

Basu and Foster present a new approach to evaluating the level of effective literacy in a region or country, one that takes into account the presence in a household of a literate person. They characterize the approach and give an empirical illustration of its use.

They designed the new measures of literacy because traditional measures of the literacy rate (R) ignore how the presence of a literate person in the household affects literacy. They contend that literate household members generate a positive externality — a kind of public good — for illiterate members. They believe their new measures will be superior to R in predicting or explaining other achievements that depend on literacy.

They expect the rate of diffusion of a new technology for farming, for example, to be more closely linked to the effective literacy rate than to the usual literacy rate. If an agricultural extension worker leaves behind a brochure explaining how to plant and care for high-yielding varieties, an illiterate person who lives in a household with at least one literate member has access to that public good; an isolated illiterate — whose household has no literate members — may not have.

Similarly, if the presence (or absence) of one literate household member increases the chance of a child becoming literate, so the effective literacy rate should be a better predictor of future generations' literacy levels.

Some changes in policy emphasis might be expected if the new effective literacy measures are used. There might be a shift, for example, toward ensuring a better distribution of literacy across households or toward addressing more seriously the problem of female illiteracy.

More work is needed to determine if a child in a household with a higher percentage of literate adults has more frequent access to literacy skills.

This paper — a product of the Office of the Senior Vice President, Development Economics — is part of a larger effort in the Bank to promote research on education and literacy. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Michelle Mason, room MC4-338, telephone 202-473-0809, fax 202-522-1158, Internet address mmason@worldbank.org. The authors may be contacted at kbasu@worldbank.org or fosterje@ctrx.vanderbilt.edu. (32 pages)

1998. The Structure and Determinants of Inequality and Poverty Reduction in Ghana, 1988–92

Sudharshan Canagarajah, Dipak Mazumdar, and Xiao Ye

Poverty reduction in Ghana between 1988 and 1992 came mainly from improvements in income levels and its distribution in the informal and nonfarm sectors outside Accra. Adjustment policies — which aimed to cut back public sector employment and stimulate activities in the private sector — succeeded in raising the living standards in the rural areas and other cities, but not in Accra.

Using three rounds of the Ghana Living Standard Survey, conducted between 1988 and 1992, Canagarajah, Mazumdar, and Ye present findings that shed light on the structure of inequality among different socioeconomic groups in different geographic areas, in the context of poverty reduction.

First, poverty reduction can be attributed mainly to improvements in both average levels of income and the pattern of its distribution in the informal and nonfarm sectors in other cities and rural areas outside the capital city, Accra.

Second, an analysis of different measures of inequality reveals that the most important changes in the degree of inequality took place at the lower end of the distribution. But the direction of change was different in Accra compared with the localities outside Accra. In Accra, while inequality increased overall, the inequality in the lower part of the distribution increased much more. In other cities, there was a more or less uniform improvement all along the distribution. But in the rural areas, there was a significant improvement at the lower end, but a deterioration at the upper end.

Third, structural adjustment — which aimed to cut back public sector employment and stimulate activities in the private sector — raised living standards in rural areas and other cities, but not in Accra. The public sector is much larger in Accra than in other cities and rural areas. Contraction of the public sector in other cities and rural areas was compensated for by income growth in the informal and nonfarm sectors. But contraction of Accra's large public sector dominated the local economy, so living standards declined in both formal and informal sectors. Accra's economy will probably grow as its private and informal sectors grow.

Fourth, major shifts in the population occurred in all localities from the formal to the informal sector, but the magnitude of the shift was largest in Accra — in fact, several times more than in the other localities. The deterioration of the income at the lower part of the distribution in both the formal and the informal sectors is mainly responsible for the decline in the welfare of the low income households in Accra.

These findings suggest that an integrated regional strategy, taking into account the local socioeconomic structure, is necessary for achieving economic growth and poverty reduction in all regions.

Another important finding: The poor do not benefit as much from education as the nonpoor do because there is very low return (in income) to primary education, the highest level most poor Ghanaians can hope for. Education helps increase, rather than decrease, inequality, so primary education for the poor should be designed to provide them with income-earning skills.

Developing economic strategies for sustainable poverty reduction will require further research on activities in the informal sector. Another issue that requires investigation is the role of different administrative regions in the determination of household welfare that seems to have changed over the period under study. Findings from such an analysis will facilitate the design of appropriate regional strategies for poverty reduction in Ghana.

This paper — a product of the Poverty Reduction and Social Development Division, Africa Region — is part of a larger effort in the region to undertake policy relevant research on poverty reduction. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Ari Garscadden, room J2-269, telephone 202-473-8400, fax 202-473-7913, Internet address agarscadden@worldbank.org. The authors may be contacted at scanagarajah@worldbank.org, dmazumdar@worldbank.org, or xye@worldbank.org. (32 pages)

1999. Heterogeneity among Mexico's Micro-Enterprises: An Application of Factor and Cluster Analysis

Wendy V. Cunningham and William F. Maloney (October 1998)

The small firm sector comprises several types. Although some are a refuge for displaced salaried workers, most were started by workers who chose to be entrepreneurs — and they show dynamics consistent with patterns in the industrial world.

A long tradition sees the small firm sector as a holding pattern for workers queuing for jobs in the formal sector of a segmented labor market. An alternative "entrepreneurial" view suggests that many workers prefer self-employment to salaried jobs. These competing views can be resolved if the sector is heterogenous.

Using factor and cluster analysis, Cunningham and Maloney generate a typology of the sector by taking advantage of a Mexican data set on micro-firms that offers information on a broad range of small firm characteristics. The methodology permits divisions to emerge from the data without the a priori imposition of a theoretical structure.

The data break into several distinct groups, broadly characterized as highly profitable and dynamic young firms, older firms that have stabilized at a small size, and young firms that act as an employer of last resort. Those in the last group, comprised of older entrepreneurs with low levels of education, are the most likely to cite that they started their firms because they were unable to find a salaried job.

In general most of the firm owners in all groups stated that they chose self-employment over formal sector employment in order to be independent, collect higher earnings, or follow family tradition. These survey responses are supported by the finding that income distribution adjusted for human capital is composed of two subdistributions, with the "underperforming" distribution comprising only 14 percent of the sample.

The factor analysis also implies that firm owner characteristics and firm size or profitability may not be correlated. For example, young workers who we might think are forced into the small firm sector due to inability to enter the formal job market do not necessarily earn less or have less capital than older entrepreneurs. Furthermore, a distribution of the earnings residual factor shows that very few firms, regardless of the firm owner's age, are earning below their expected profits.

The data suggest that the small size of informal firms may not necessarily result from limited access to financial institutions or a desire to evade labor or tax laws. Instead, the firms simply may be in the beginning stages of a growth process or owners may prefer to remain small.

This paper is a product of the Poverty Reduction and Economic Management Sector Unit, Latin America and the Caribbean Region. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Tania Gomez, room I8-102, telephone 202-473-2127, fax 202-522-2119, Internet address tgomez@worldbank.org. William Maloney may be contacted at wmaloney@worldbank.org. (42 pages)

2000. GATT Experience with Safeguards: Making Economic and Political Sense of the Possibilities that the GATT Allows to Restrict Imports

J. Michael Finger
(October 1998)

Suggested guidelines for a safeguards process that emphasizes an import restriction's impact on the domestic economy: Domestically, who would benefit from the proposed restriction and who would lose, and by how much? And how would import-using interests be affected?

Realizing that trade liberalization would require periodic adjustments because of problems in particular industries, GATT's framers provided that tariff reductions that led to such problems could be renegotiated; in an emergency a country could raise its tariff first and negotiate compensation with the principal exporting countries later.

GATT lists many provisions that allow import restrictions, provisions that, over time, have proven quite fungible. Renegotiations were replaced by negotiated quantitative restraints (VERs), which were replaced by antidumping. The problem (troublesome imports) was always the same, but the instruments changed.

And none of the instruments made much political or economic sense.

They did not help a government isolate those import restrictions for which the benefits to the domestic economy would exceed the costs.

And politically, the procedures through which renegotiations, VERs, or antidumping actions are decided provide a public tribune for interests that would benefit from protection but provide no voice for domestic interests that would bear the costs of restricted access to imports.

Finger offers guidelines for a safeguards process that makes more economic and political sense:

- *Identify the costs and losers as well as the benefits and winners.*
- *Be clear that the action is an exception to the principles underlying the liberalization program.* Emphasize that too many such exceptions would constitute abandonment of the liberalization program and its benefits. Included in the investigation process should be an expression of the costs the proposed restriction would impose.
- *Don't sanctify the criteria for the action.* Procedures should not presume, as antidumping does, that there is some good reason for granting exceptions. Providing a list of good reasons invites protection-seekers to demonstrate that they qualify and places the government in the position of having to demonstrate that they do not. Procedures should stress that the function of the review is to identify the benefits, costs, and domestic winners and losers from the action requested.

This paper is a product of Trade, Development Research Group. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Lili Tabada, room MC3-333, telephone 202-473-6896, fax 202-522-1159, Internet address ltabada@worldbank.org. The author may be contacted at jfinger@worldbank.org. (26 pages)

2001. Measuring the Dynamic Gains from Trade

Romain Wacziarg
(November 1998)

Empirical analysis confirms that a policy of trade openness has a strong positive impact on economic growth. The accelerated accumulation of physical capital accounts for more than half this growth. Enhanced technological transmissions and improvements in the quality of macroeconomic policy each account for about 20 percent of the effect of openness on growth.

Wacziarg investigates the links between trade policy and economic growth using data from a panel of 57 countries from 1970–89. This is the first attempt to empirically evaluate, in a cross-country context, the respective roles of various theories of dynamic gains from trade in explaining the observed positive impact of trade openness on economic growth.

Wacziarg uses a new measure of trade openness, based on the effective policy component of trade shares, in a simultaneous equations system aimed at identifying the effect of trade policy on several determinants of growth. The results suggest that a policy of trade openness has a strong positive impact on economic growth.

The accelerated accumulation of physical capital accounts for more than half this effect. Enhanced technological transmissions and improvements in the quality of macroeconomic policy each account for about 20 percent of the impact of trade openness on growth.

This decomposition is robust to alternative specifications and time periods. Wacziarg also successfully tests whether the empirical methodology captures all or most of the effects of trade policy on growth.

The lack of statistically significant results concerning several other channels may be due to measurement problems.

The black market premium may be a weak proxy for the efficiency of the price system. Moreover, international technological transmissions are very hard to measure, so there may be a downward bias in the estimates based on the manufactured exports channel, and a corresponding overstatement of other channels.

This paper — a product of the Development Prospects Group, Development Economics — is part of a larger effort in the Bank to analyze the relationship between openness and economic growth. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Sarah Crow, room MC4-706, telephone 202-473-0763, fax 202-522-2578, Internet address scrow@worldbank.org. The author may be contacted at wacziarg@gsb.stanford.edu. (52 pages)

2002. Accounting for Toxicity Risks in Pollution Control: Does It Matter?

Susmita Dasgupta, Benoît Laplante, and Craig Meisner
(November 1998)

It is important for environmental regulators to weight pollutants for their relative toxicity risk when developing priorities for pollution control efforts at the industrial or regional level. But at high levels of aggregation, the choice of indicator need not be the subject of immense debate.

The accounting and public release of information about industrial toxic pollution emissions is meeting increasing criticism in that these listings typically do not account for the different toxicity risks associated with different pollutants. A firm emitting a large amount of a relatively harmless substance is ranked as a heavier polluter than a firm emitting a small quantity of a potent substance.

Such "unweighted" rankings of firms, it is argued, may lead to a misallocation of resources and a wrong prioritization of efforts in pollution control. This is a particular problem in developing countries, where sources for pollution control are typically scarce.

To account for varying toxicity risk, a number of organizations have developed thresholds or exposure limits for various pollutants. But many toxicity risk factors and methods are currently available, and different risk indicators yield different results and hence priorities.

So Dasgupta, Laplante, and Meisner review seven risk methods and construct 10 sets of toxicity risk factors from those indicators. They apply those factors to the 3,426 industrial municipalities of Brazil and explore Rio de Janeiro and São Paulo in detail.

After ranking states and municipalities for their pollution intensity, results indicate that at the *state* level, risk-weighted rankings remain largely the same across the 10 sets of toxicity risk factors used in this paper. By and large the result also holds true at the *municipal* level.

Although at the *state* level the unweighted ranking is relatively similar to the risk-weighted ranking, at the *municipal* level significant differences were found between the risk-weighted and unweighted rankings.

These findings suggest that it is important for environmental regulators to weight pollutants for their relative toxicity risk when developing priorities for pollution control efforts at the industrial or regional level. But at high levels of aggregation, the choice of indicator need not be the subject of immense debate.

This paper — a product of Environment and Infrastructure, Development Research Group — is part of a larger study on industrial pollution. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Yasmin D'Souza, room MC2-622, telephone 202-473-1449, fax 202-522-3230, Internet address ydsouza@worldbank.org. Susmita Dasgupta may be contacted at sdasgupta @worldbank.org. (36 pages)

2003. Thailand's Corporate Financing and Governance Structures

Pedro Alba, Stijn Claessens, and Simeon Djankov
(November 1998)

Weaknesses in corporate governance and the fragile financial structure of many corporations contributed to, and deepened Thailand's recent financial crisis. Large corporations need to reduce their vulnerability to economic shocks and improve corporate governance; smaller firms should achieve a more stable funding structure.

Alba, Claessens, and Djankov assess Thailand's policy options for reducing large corporations' vulnerability to economic shocks and improving their corporate governance — and for providing smaller firms a more stable funding structure.

Using data for firms listed on Thailand's stock exchange, they empirically assess the relative importance of various factors determining the cost of capital, the availability of financing, and policies and distortions that affect corporate governance in nonfinancial firms. The empirical findings highlight weaknesses in corporate governance and the inherent risks in Thailand's corporate financing structures.

They conclude that the most important task in improving the structure of corporate financing and the framework for corporate governance is to change incentives. This will involve:

- *Accelerating legal reform, including reform of bankruptcy and foreclosure laws.*
- *Improving bank monitoring of enterprise management and encouraging banks to develop more arm's-length relationships with firms.* This will require greater transparency and disclosure of ownership relationships and stricter enforcement of insider and related lending limits, violation of which contributed poor intermediation and the recent crisis.
- *Improving disclosure and accounting practices.* Self-regulatory agencies may need to play more of a role, possibly with more legal power to discipline violators.
- *Better enforcement of corporate governance rules.* The formal structure for corporate governance is standard but enforcement is weak.
- *Facilitation of equity infusions.* Investors — especially minority shareholders — may need to play a more direct role in monitoring and disciplining managers. To attract new infusions of equity, new equity owners may need more-than-proportional representation on the board of directors until other investor protection mechanisms are strengthened.
- *Improving the framework for corporate governance.* A broad public discussion of corporate governance, similar to recent discussions in the United Kingdom and elsewhere, may be needed to clarify the distribution of control in the economy's real sector.
- *Strengthening institutions responsible for gathering and analyzing data on firms of all sizes and for monitoring firm performance and behavior.*

This paper — a product of the Economic Policy Unit, Finance, Private Sector, and Infrastructure Network — is part of a larger effort in the network to study the performance and financing structures of East Asian corporations. The paper. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Rose Vo, room MC10-628, telephone 202-473-3722, fax 202-522-2031, Internet address hvo1@worldbank.org. Stijn Claessens may be contacted at cclaessens @worldbank.org. (27 pages)

2004. What Can Be Expected from African Regional Trade Arrangements?: Some Empirical Evidence

Alexander J. Yeats
(November 1998)

Sub-Saharan Africa must adopt appropriate trade and structural adjustment policies to become more competitive internationally and to capitalize on opportunities in foreign markets. The exchange of regional preferences alone cannot reverse Africa's unfavorable export trends. A far more promising policy approach would be broad-based reductions in African trade barriers, on a most-favored-nation basis.

For over three decades, Sub-Saharan African countries have had an interest in regional integration initiatives to accelerate their industrialization and growth.

With the help of a more comprehensive database on intra-African trade than was previously available, Yeats examines a proposal to exchange trade preferences among Sub-Saharan African countries. The data suggest that problems with African regional trade arrangements are more daunting than is generally recognized.

Africa's non-oil exports are concentrated in a few products, none of them important regional imports. There is relatively little intra-African trade and the noncomplementarity problem in African trade cannot be resolved quickly. Moreover, intra-African trade is highly concentrated, geographically, with almost no trade between East and West Africa.

This finding makes less compelling the arguments that regional trade can help overcome problems of small domestic markets.

The range of processed products African countries export competitively is extremely narrow and many have a comparative advantage in the same items. Excluding refined petroleum, one or more African countries have a comparative advantage in products that account for about 5 percent of regional imports.

In short, regional trade agreements seem to present Africa with a "lose-lose" situation.

If Africa does not develop export capacity in key machinery and transport equipment, the region will continue to depend heavily on third countries for those exports. Dependence on non-African suppliers would seemingly reduce the likelihood of regional arrangements succeeding. However, machinery and transport equipment are normally manufactured using capital-intensive production techniques and Africa has no comparative advantage in those goods. If Africa tries to develop an export capacity in this sector, the goods will be relatively high in cost and probably less reliable than similar products from "efficient" suppliers. Attempts to use such equipment would undercut the competitive position of Sub-Saharan African exporters in global markets.

Trade reform on a most-favored-nation basis is a more promising option. Evidence shows a strong positive association between lower trade barriers and economic growth.

This paper — a product of Trade, Development Research Group — is part of a larger effort in the group to accelerate the trade and growth of developing countries. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Lili Tabada, room MC3-333, telephone 202-473-6896, fax 202-522-1159, Internet address ltabada@worldbank.org. The author may be contacted at ayeats @worldbank.org. (107 pages)

2005. Fiscal Federalism and Macroeconomic Governance: For Better or For Worse?

Anwar Shah
(November 1998)

Shah concludes that, contrary to a common misconception, decentralized fiscal systems offer more potential for improved macroeconomic governance than do centralized fiscal systems, because they require greater clarity about the roles of various players and decisionmakers and — to ensure fair play — greater transparency in rules governing interactions.

In analyzing the institutional environment for macroeconomic management, Shah discusses monetary policy, fiscal policy, and subnational borrowing. In analyzing the macroeconomic dimensions of securing an economic union, he discusses the regulatory environment, tax coordination, transfer payments and social insurance, intergovernmental fiscal transfers, and regional equity. Finally, he discusses the challenges of globalization and draws lessons from experience about fiscal reform in developing countries: Among them:

- Monetary policy is best entrusted to an independent central bank with a mandate for price stability.
- Fiscal rules accompanied by "gatekeeper" intergovernmental councils or committees provide a useful framework for fiscal discipline and coordination of fiscal policy.
- The integrity and independence of the financial sector contribute to fiscal prudence in the public sector.
- To ensure fiscal discipline, governments at all levels must be made to face the financial consequences of their decisions.
- Societal norms and consensus about the roles of various levels of government and limits to their authority are vital to the success of decentralized decisionmaking.
- Tax decentralization is a prerequisite for subnational access to credit markets.
- Higher-level institutional assistance may be needed to finance local capital projects.
- An internal common market is best preserved by constitutional guarantees.
- Intergovernmental transfers in developing countries undermine fiscal discipline and accountability while building transfer dependencies that cause a slow economic strangulation of fiscally disadvantaged regions.
- Periodic review of jurisdictional assignments is essential to realign responsibilities with changing economic and political realities.
- Finally, and contrary to a common misconception, decentralized fiscal systems offer more potential for improved macroeconomic governance than do centralized fiscal systems.

This paper — a product of the Country and Regional Relations Division, Operations Evaluation Department — is part of a larger effort in the department to learn lessons of experience in improving public sector performance in developing countries. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Silvana Valle, room G6-079, telephone 202-458-4493, fax 202-522-3124, Internet address svalle@worldbank.org. The author may be contacted at ashah @worldbank.org. (46 pages)

2006. Household Welfare Measurement and the Pricing of Basic Services

Jesko Hentschel and Peter Lanjouw
(November 1998)

In many countries, markets for basic services such as electricity, water, or gas are characterized by rationing, subsidies, or increasing marginal tariff pricing. If consumption is used as a welfare indicator, household's different access to, and payments for, such publicly provided services have to be taken into account.

Hentschel and Lanjouw discuss when and how to adjust expenditures derived from household surveys to reflect the consumption of basic services.

They discuss simple adjustment methods for markets that are subsidized, rationed, or subject to increasing marginal tariff pricing.

Using Ecuador as an example, they show how incorporating adjustments in markets for water, electricity, and cooking gas can significantly alter estimates of poverty and are therefore important to a comprehensive measure of welfare.

For Ecuador, adjustments must be made for water, for example, because the nonpoor urban population often has access to subsidized public water and the poor depend on the private market; adjustments must be made for electricity because increasing marginal tariff rates lead to different prices per kWh. Adjustments need not be made for cooking gas, which is highly subsidized in Ecuador, because the amount consumers use is not rationed.

The authors compare the sensitivity of poverty indicators and the poverty profile in Ecuador to adjustments in nominal expenditures for basic services in Ecuador. The poverty profile showed relatively few changes, but poverty indicators (headcount and the poverty gap for extreme poverty) showed changes that were statistically significant.

The results dramatize how important it is to carefully analyze markets for basic services when deriving welfare measures from household surveys. Such adjustments, by improving the measure of welfare, can also encourage wider acceptance and use of consumption as a welfare indicator and a guide for developing public policy.

This paper — a joint product of the Poverty Group, Poverty Reduction and Economic Management Network and the Development Research Group — is part of a larger effort in the Bank to develop guidelines and tools for welfare analyses based on household surveys. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact the PREM Advisory Service, room MC4-501, telephone 202-458-7736, fax 202-522-1135, Internet address premadvisory @worldbank.org. Jesko Hentschel may be contacted at jhentschel@worldbank.org. (23 pages)

2007. Regional Integration Arrangements: Static Economic Theory, Quantitative Findings, and Policy Guidelines

Dean A. DeRosa
(November 1998)

This paper reviews the static theory of regional integration arrangements and considers the economic impact of such arrangements, based on recent quantitative studies of customs unions and free trade areas.

DeRosa reviews the static theory of regional integration arrangements, identifying and analyzing the impact of such arrangements on the trade and welfare of member countries, nonmember countries, and the world at large.

He develops eight policy guidelines that apply mainly to small trading countries unable to influence their international terms of trade or to cease trading entirely with nonmember countries, assuming increasing cost conditions in member countries, homogeneous traded goods, and perfect competition.

The guidelines advise establishing regional facilities for compensatory lump-sum transfers or other intrabloc payments to avoid the possibility that, where a trading bloc would be welfare-improving overall, the bloc would not be formed because of the (justified) recalcitrance of one or more would-be member countries whose economic welfare might be reduced by the adoption of the regional trade arrangement.

Other guidelines are appropriate on commonsense grounds. For example: Regional trade arrangements will be welfare-improving if they are formed by countries that are predominantly least-cost producers of exportables, or if they give rise to increased imports from all trading partners.

Yet few if any extant customs unions or free trade areas meet such simple guidelines fully.

To some extent, customs unions and free trade areas are expected to result in cessation of trade (in homogeneous goods) with nonmember countries. Where trade between member countries and nonmember countries is expected to continue under regional arrangements (as real-world data suggest), internationally determined terms of trade rather than regionally determined terms of trade are likely to prevail within the trading bloc, limiting the welfare-improving effects of creating trade but not the welfare-reducing effects of trade diversion.

Among the most interesting and arguably "operational" policy guidelines to emerge from DeRosa's analysis are those concerning countries that might choose to join (1) a large rather than small regional trading bloc, (2) a regional integration arrangement to overcome hindrances facing exports to third countries, or (3) a regional integration arrangement that could have strong pro-competitive effects under imperfect competition and increasing returns to scale. Guidelines 1 and 2 concern mostly developing countries; guideline 3 concerns mostly advanced countries. But the economic bases for the three guidelines are relevant and compelling.

This paper — a product of Trade, Development Research Group — is a background paper prepared for a World Bank Policy Research Report, *Regionalism and Development*. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact

Lili Tabada, room MC3-333, telephone 202-473-6896, fax 202-522-1159, Internet address ltabada@worldbank.org. (118 pages)

2008. Volatility and Contagion in a Financially Integrated World: Lessons from East Asia's Recent Experience

Pedro Alba, Amar Bhattacharya, Stijn Claessens, Swati Ghosh, and Leonardo Hernandez
(November 1998)

Recent events in East Asia highlighted the risks of weak financial institutions and distorted incentives in a financially integrated world. These weaknesses led to two sources of vulnerability: East Asia's rapid buildup of contingent liabilities, and overreliance on short-term foreign borrowing.

The buildup of vulnerabilities in East Asia is shown here to be mainly the result of weaknesses in financial intermediation, poor corporate governance, and deficient government policies, including pro-cyclical macroeconomic policy responses to large capital inflows.

Weak due diligence by external creditors, fueled partly by ample global liquidity, also played a role but global factors were more important in triggering the crises than in causing them.

The crisis occurred partly because the economies lacked the institutional and regulatory structure to cope with increasingly integrated capital markets. Trouble arose from private sector decisions (by both borrowers and lenders) but governments created incentives for risky behavior and exerted little regulatory authority. Governments failed to encourage the transparency needed for the market to recognize and correct such problems as unreported mutual guarantees, insider relations, and nondisclosure of banks' and companies' true net positions.

Domestic weaknesses were aggravated by poorly disciplined foreign lending. The problem was not so much overall indebtedness as the composition of debt: a buildup of short-term unhedged debt left the economies vulnerable to a sudden loss of confidence.

The same factors made the crisis's economic and social impact more severe than some anticipated. The loss of confidence directly affected private demand — both investment and consumption — which could not be offset in the short run by net external demand.

The effect on corporations and financial institutions has been severe because of the high degree of leveraging and the unhedged, short-term nature of foreign liabilities, which has led to a severe liquidity crunch. Domestic recession, financial and corporate distress, liquidity constraints, and political uncertainty were self-reinforcing, leading to a severe downturn.

This paper — a joint product of the Economic Policy Unit, Poverty Reduction and Economic Management Network and the Central Bank of Chile — was presented at the CEPR/World Bank conference "Financial Crises: Contagion and Market Volatility," May 8–9, 1998, London, and at the PAFTAD 24 conference, "Asia Pacific Financial Liberation and Reform," May 20–22, 1998, in Chiangmai, Thailand. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Debbie Fischer, room MC4-168, telephone 202-473-8656, fax 202-522-1135, Internet address dfischer@worldbank.org. Pedro Alba may be contacted at palba @worldbank.org. (63 pages)

2009. Poverty and the Economic Transition: How Do Changes in Economies of Scale Affect Poverty Rates for Different Households?

Peter Lanjouw, Branko Milanovic, and Stefano Paternostro
(November 1998)

Has the economic transition in Eastern Europe and the countries of the former Soviet Union been harder on pensioner households or on households containing children? Do per capita measures of welfare give a misleading picture?

Much attention has been paid to the relative vulnerability of two well-defined household groups during the transition. Some observers argue that old-age pensioner households have been relatively protected because of a less steep decline in real pensions compared with wages in most transition economies. By contrast, households with young children are believed to have experienced a substantial decline in living standards under reform and show strikingly higher rates of measured poverty than pensioner households.

But others argue that the elderly have suffered more than the young during the transition. Can these conflicting viewpoints about the relative poverty of old and young households be arbitrated?

Lanjouw, Milanovic, and Paternostro show that strong (though implicit) assumptions underpin certain poverty comparisons. Notably, using a per capita measure of individual welfare assumes that there are no economies of scale in household consumption, in the sense that the per capita cost of reaching a specific level of welfare does not fall as household size increases. Relaxing that assumption could affect comparisons, showing higher poverty rates among the elderly because their households tend to be smaller than the households containing children.

Even the nature of the transition has implications for economies of scale. The relative cost of housing and other goods and services with at least some public-good characteristics has risen rapidly. These relative price shifts hit small households particularly hard, because a greater share of their expenditures goes to public and quasi-public goods.

But transition economies have also experienced big increases in the relative prices of goods and services consumed largely by children, such as kindergarten and other education services. These increases affect younger households more.

Since there is no accepted way to establish the true extent of economies of scale in a given country, the question can't be answered exactly. But clearly a small departure from a per capita measure may be enough in some cases to overturn the conventional relative ranking of poverty headcounts: poverty among the elderly may then turn out to be worse than among children.

This paper — a product of Poverty and Human Resources, Development Research Group — is part of a larger effort in the group to study changes in welfare and inequality during the transition. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Patricia Sader, room MC3-632, telephone 202-473-3902, fax 202-522-1153, Internet address psader@worldbank.org. Branko Milanovic may be contacted at bmilanovic@worldbank.org. (35 pages)

2010. The Real Impact of Financial Shocks: Evidence from the Republic of Korea

Ilker Domaç and Giovanni Ferri
(November 1998)

To what extent did tightening monetary policy magnify the East Asian crisis through its adverse effects on credit supply?

In the Republic of Korea, interest rate spreads, which capture credit channel effects, influence economic activity, and these effects are disproportionately larger for small and medium-size enterprises. So policymakers who neglect credit channel effects might be "overkilling the economy" and altogether overlooking the disproportionate effects of monetary and financial shocks on some sectors.

The debates surrounding the recent East Asian crisis have focused not only on causes but also on policy actions in the wake of the initial shock. This has raised questions about the relationship between monetary policy and market confidence. Specifically, would rising interest rates bolster or depress market confidence? To answer this question requires assessing whether, and to what extent, monetary and financial shocks are magnified through the economy via the credit channel.

Domaç and Ferri focus on the Republic of Korea — a particularly good case for testing credit channel effects — with two objectives:

- To ascertain whether and to what extent interest rate spreads could help predict subsequent fluctuations in real economic activity.
- To test whether small and medium-size enterprises suffer more than other businesses do from the adverse effects of the credit channel.

The authors' empirical findings support the hypothesis that spreads that capture credit channel effects do indeed influence economic activity. Specifically, spreads contain significant information for predicting the future course of industrial production. The effect is, as one might have assumed, disproportionately larger for small and medium-size enterprises. Thus policymakers, in Korea and elsewhere, who neglect credit channel effects might be "overkilling the economy" and altogether overlooking the disproportionate effects of monetary and financial shocks on various segments of the economy.

This paper — a product of the Poverty Reduction and Economic Management Sector Unit and the Financial Sector Development Sector Unit, East Asia and Pacific Region — is part of a larger effort in the region to analyze the patterns and consequences of the East Asian crisis, with particular reference to the link between the real and financial sectors. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Muriel Greaves, room MC8-150, telephone 202-458-1876, fax 202-522-1784, Internet address mgreaves@worldbank.org. The authors may be contacted at idomac@worldbank.org or gferri@worldbank.org. (32 pages)

2011. Measuring Poverty Using Qualitative Perceptions of Welfare

Menno Pradhan and Martin Ravallion
(November 1998)

Subjective poverty lines — based on the self-assessed adequacy of a family's food, housing, and clothing — accord closely on average with independent "objective" poverty lines. There are notable differences, however, when geographic and demographic poverty profiles are constructed.

Pradhan and Ravallion show how subjective poverty lines can be derived using simple qualitative assessments of perceived consumption adequacy, based on a household survey. Respondents were asked whether their consumption of food, housing, and clothing was adequate for their family's needs.

Pradhan and Ravallion's approach, by identifying the subjective poverty line without the usual "minimum-income question," offers wide applications in developing country settings. They implement it using survey data for Jamaica and Nepal.

The implied subjective poverty lines are robust to alternative methods of dealing with other components of consumption, for which the subjective "adequacy" question was not asked.

The aggregate poverty rates based on subjective poverty lines come close to those based on independent "objective" poverty lines.

There are notable differences, however, when geographic and demographic poverty profiles are constructed.

This paper — a product of Poverty and Human Resources, Development Research Group — is part of a larger effort in the department to improve methods of poverty measurement. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Patricia Sader, room MC3-632, telephone 202-473-3902, fax 202-522-1153, Internet address psader@worldbank.org. Martin Ravallion may be contacted at mravallion@worldbank.org. (38 pages)

2012. Export Quotas and Policy Constraints in the Indian Textile and Garment Industries

Sanjay Kathuria and Anjali Bhardwaj
(November 1998)

Substantial export tax equivalents exist for Indian textile and clothing exports, especially to the United States. In today's world, these would have been even higher if domestic Indian policy constraints had been relaxed. In tomorrow's world, the health of India's textile and clothing industries may depend on timely relaxation of these constraints.

The Agreement on Textiles and Clothing will abolish all quota restrictions in trade in textiles and clothing by the year 2005. Dismantling the quota regime represents both an opportunity (for developing countries to expand exports) and a threat (because quotas will no longer guarantee markets and even the domestic market will be open to competition).

Data about the real burden imposed by distorting but nontransparent policies under the quota regime are inadequate, so Kathuria and Bhardwaj interviewed traders in Delhi and Bombay about quota rents. They provide comprehensive estimates of the magnitude of the implicit export taxes resulting from the labyrinth of quotas imposed under the WTO Agreement on Textiles and Clothing. Using the concept of an export tax equivalent (or ETE), they assess how much exports are restricted.

The international trade regime in textiles and clothing imposes a substantial tax equivalent on Indian exports. Between 1993 and 1997, ETEs for garment exports to the United States were roughly double those for the European Union. The ETEs for the United States declined in 1996, which could be a warning signal that India faces increasing competition from a NAFTA-empowered Mexico.

From India's viewpoint, the European Union is ahead of the United States in dismantling the quota regime — and in not restricting Indian cotton (garment) exports (where India has a comparative advantage) more than synthetics.

India's strengths in this sector lie in natural resources and factor endowments — raw cotton and cheap labor. The Indian garment industry's decentralized production structure — subcontracting, which is low risk and low capital — has served the industry well but has excluded Indian products from the mass market for clothing, which demands consistent quality for large volumes of a single item.

Growth in Indian exports may require a shift to an assembly-line, factory-type system. This would probably require:

- No longer restricting garment production to the small-scale sector (and ending other anachronistic policies).
- Making labor policy more flexible.
- Ending the policy bias against synthetic fibers.
- Reducing transaction costs for exports.

This paper — a product of Trade, Development Research Group — is part of a larger effort in the group to assess the impact of industrial country trade policies on developing countries. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Lili Tabada, room MC3-333, telephone 202-473-6896, fax 202-522-1159, Internet address ltabada @worldbank.org. (38 pages)

2013. A New Database on Investment and Capital for Agriculture and Manufacturing

Al Crego, Donald Larson, Rita Butzer, and Yair Mundlak
(November 1998)

Documentation for a new cross-country database on agricultural investment and capital, along with compatible measures for manufacturing and aggregate investment and capital.

In this paper, Crego, Larson, Butzer, and Mundlak document a new database on sectoral investment and capital, providing details about sources of investment data and the method used to convert those data series into capital stock series.
They also provide a copy of the computer program used to implement the method. The data set is available for electronic distribution and will soon be posted on the World Wide Web.

They broadly define agricultural capital and calculate separate series for fixed capital as well as capital embodied in livestock and treestock.

This data set — a product of Rural Development, Development Research Group — was developed as part of a larger study of the determinants of agricultural growth. This paper was designed as a reference that the authors hope will encourage others to make use of the data and expand its content. Companion papers by the authors discuss alternative methods and discuss the connection between capital accumulation and growth. The study was funded by the Bank's Research Support Budget under the research project "Total Investment, Agricultural Investment, and Investment in Manufacturing" (RPO 680-50). Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Pauline Kokila, room MC3-544, telephone 202-473-3716, fax 202-522-1150, Internet address pkokila @worldbank.org. Donald Larson may be contacted at dlarson@worldbank.org. (57 pages)

2014. Land Institutions and Land Markets

Klaus Deininger and Gershon Feder
(November 1998)

Secure property rights to land and well-functioning land rental and sales markets are essential for creating investment incentives, improving the allocation of land, and developing financial markets. Yet regulatory restrictions on land rental and sales and regulatory frameworks providing inadequate tenure security are common. This paper looks at the impact of imperfections in other factor markets and the costs and benefits of government intervention to improve the security of property rights and the functioning of land markets and draws conclusions about land policy issues.

In agrarian societies land serves as the main means not only for generating a livelihood but often also for accumulating wealth and transferring it between generations. How land rights are assigned therefore determines households' ability to generate subsistence and income, their social and economic status (and in many cases their collective identity), their incentive to exert nonobservable effort and make investments, and often their ability to access financial markets or to make arrangements for smoothing consumption and income. With imperfections in other markets, the institutions governing the allocation of land rights and the functioning of land markets will have implications for overall efficiency as well as equity.

Deininger and Feder examine how property rights in land evolve from a situation of land abundance. They discuss factors affecting the costs and benefits of individual land rights and highlight the implications of tenure security for investment incentives. They also review factors affecting participation in land sales and rental markets, particularly the characteristics of the agricultural production process, labor supervision cost, credit access, the risk characteristics of an individual's asset portfolio, and the transaction costs associated with market participation. These factors will affect land sales and rental markets differently. Removing obstacles to the smooth functioning of land rental markets and taking measures to enhance potential tenants' endowments and bargaining power can significantly increase both the welfare of the poor and the overall efficiency of resource allocation.

Drawing on their conceptual discussion, the authors draw policy conclusions about the transition from communal to individual and more formal land rights, steps that might be taken to improve the functioning of land sales and rental markets, and the scope for redistributive land reform.

This paper — a product of Rural Development, Development Research Group — was prepared as background for the forthcoming *Handbook on Agricultural Economics*. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Maria C. Fernandez, room MC3-542, telephone 202-473-3766, fax 202-522-1151, Internet address mfernandez2 @worldbank.org. The authors may be contacted at kdeininger@worldbank.org or gfeder@worldbank.org. (44 pages)

2015. The Mechanics of Progress in Education: Evidence from Cross-Country Data

Alain Mingat and Jee-Peng Tan
(November 1998)

As countries grow rich, education improves in many ways. The sector enjoys more resources for education per school-aged child, not primarily because of bigger budget allocations or an easing of the demographic burden on the system, but because teacher salaries decline substantially relative to the per capita GNP. The extra resources enable countries to expand coverage and reduce the pupil-teacher ratio, with the latter receiving increasing emphasis during the past 20 years. The implicit tradeoff against coverage is inefficient (and inequitable), particularly in countries where large portions of the population still have no access to basic education.

Mingat and Tan explore differences in education in rich and poor countries by first systematically documenting the relationship between per capita GNP and various indicators of educational development. They then exploit a simple accounting identity relating the availability of resources to their expenditure, to clarify the sources of rich countries' advantage in education.

Data for a sample of 125 countries in 1993 confirm the expected favorable relationship between per capita GNP and each of the following dimensions of educational development:

- The sector context (as reflected by the demographic burden on the education system, the government's fiscal capacity, and so on).
- The production of education services, including such factors as public spending on education and the composition of spending.
- Education outcomes, in terms of coverage and student learning.
- Efficiency of sector operations.
- Equity in access and distribution of public spending on education.

One appealing explanation for why richer countries achieve better results is that they have more resources for their education systems. But bigger budget allocations to education contribute relatively little to differences in resources.

Lighter demographic burdens in richer countries is also a relatively modest factor.

By far the most important factor is the decline of teacher salaries relative to per capita GNP, which accounts for at least half of any educational advantage at all stages of economic development.

The extra resources for education associated with income growth allows a country to expand enrollments and improve classroom conditions by reducing the pupil-teacher ratio. Early in income growth, countries allocate more of the extra resources to expand coverage; later they shift toward reducing the pupil-teacher ratio.

But, contend the authors, so long as coverage is not yet universal a more efficient strategy for educational development is to emphasize continued expansion of coverage rather than a rapid reduction in the pupil-teacher ratio. In the long run, lower levels of educational attainment among tomorrow's adults is likely to diminish learning achievement among tomorrow's children.

This paper — a product of the Education Group, Human Development Department — is part of a larger effort in the department to understand the nature of educational development. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Anahit Poghosyan, room G8-064, telephone 202-473-0898, fax 202-522-3233, Internet address apoghosyan@worldbank.org. The authors may be contacted at amingat@u-bourgogne.fr or jtan@worldbank.org. (46 pages)